

Figure 1

Plasmid Name	GENE	Parental Plasmid	Promoter/ Enhancer	Terminator
VR1223	Firefly Lux	VR1012*	CMV	BGH
VR1412	Bacterial LacZ	VR1012*	CMV	BGH
VR2901	Mouse EPO	VR1012*	CMV	BGH
VR2996	Mouse EPO	VR1012	CMV/Desmin	BGH
VR3301	Human SEAP	VR1012*	CMV	BGH
VR3502	Rat proinsulin	VR1012*	CMV	BGH
VR4151	Human IFN-omega	VR1055	CMV	mRBG
VR4700	Influenza NP	VR1255**	CMV	mRBG
VR1418	Bacterial LacZ	VR1043	RSV	BGH
VR1255	Firefly Lux	VR1223	CMV	mRBG

Intermediate plasmids

VR1012	none	V1J***	CMV	BGH
VR1043	none	VR1343	RSV	BGH
VR1055	none	VR1255	CMV	mRBG

Figure 2A

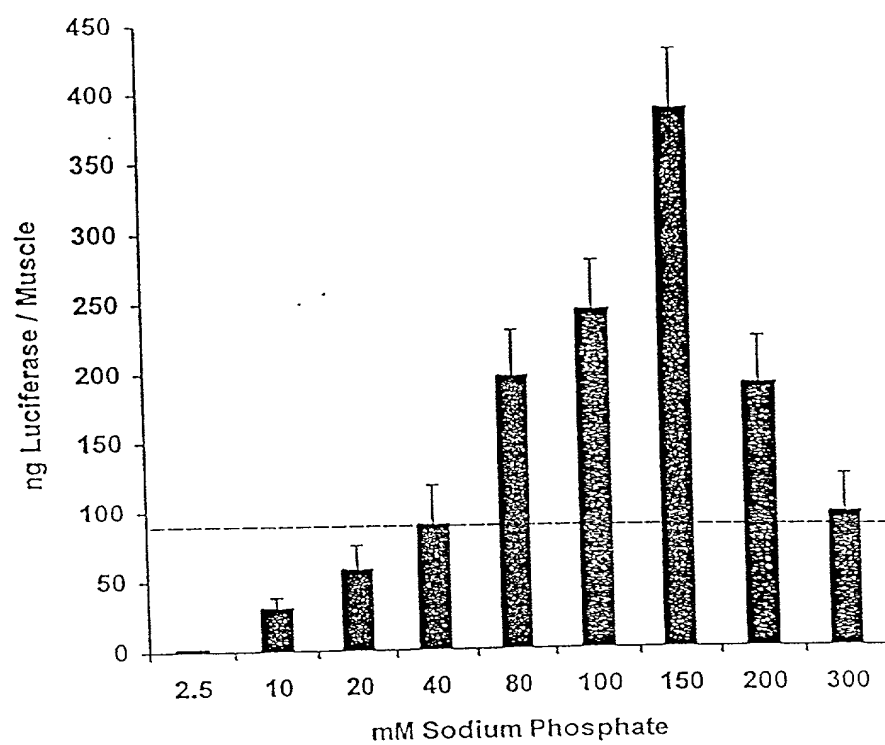


Figure 2B

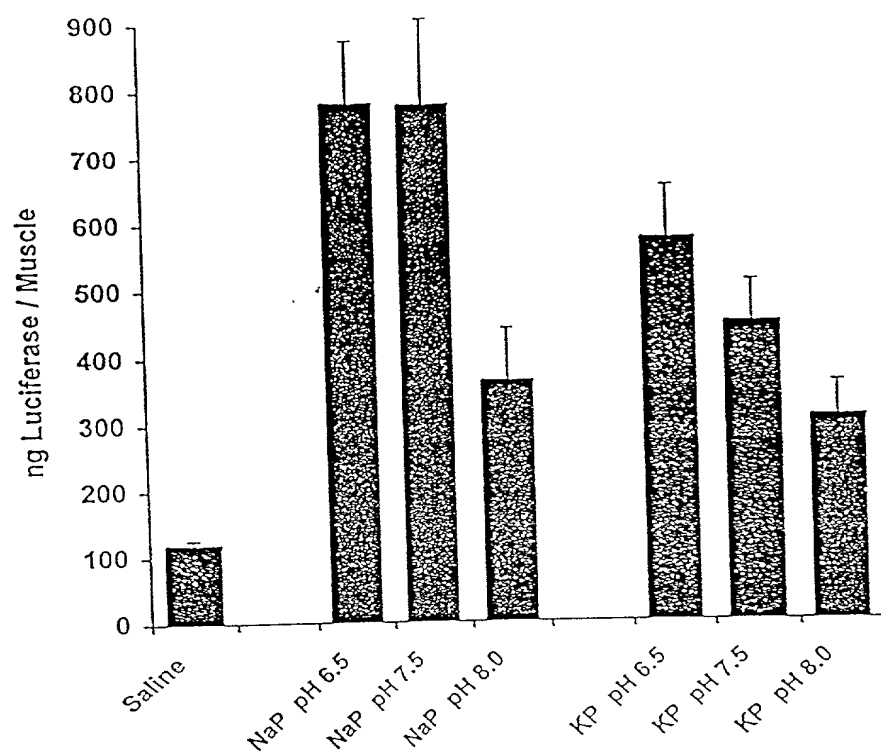


Figure 2D

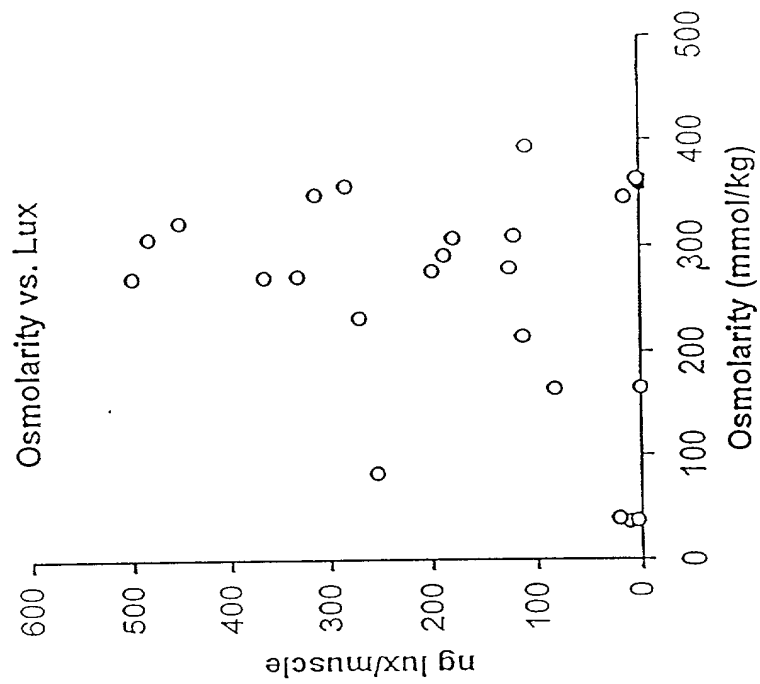


Figure 2C

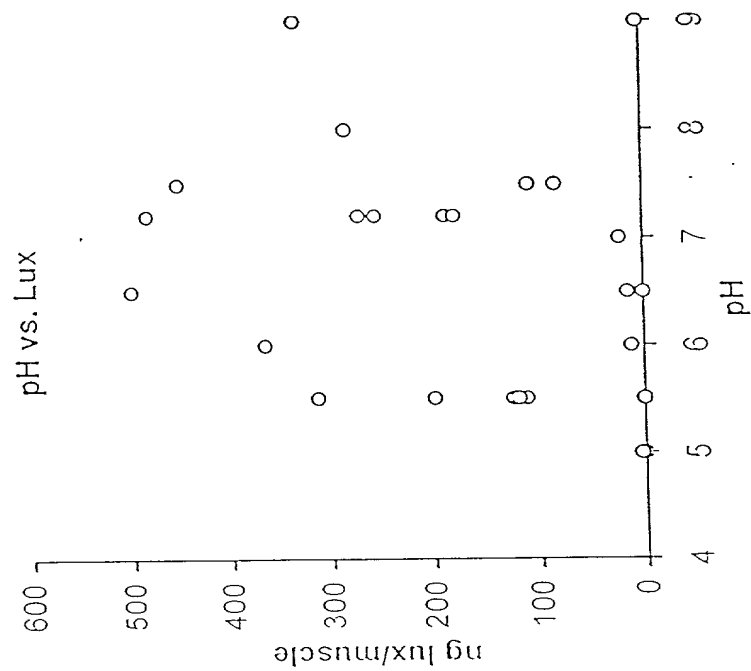


Figure 3

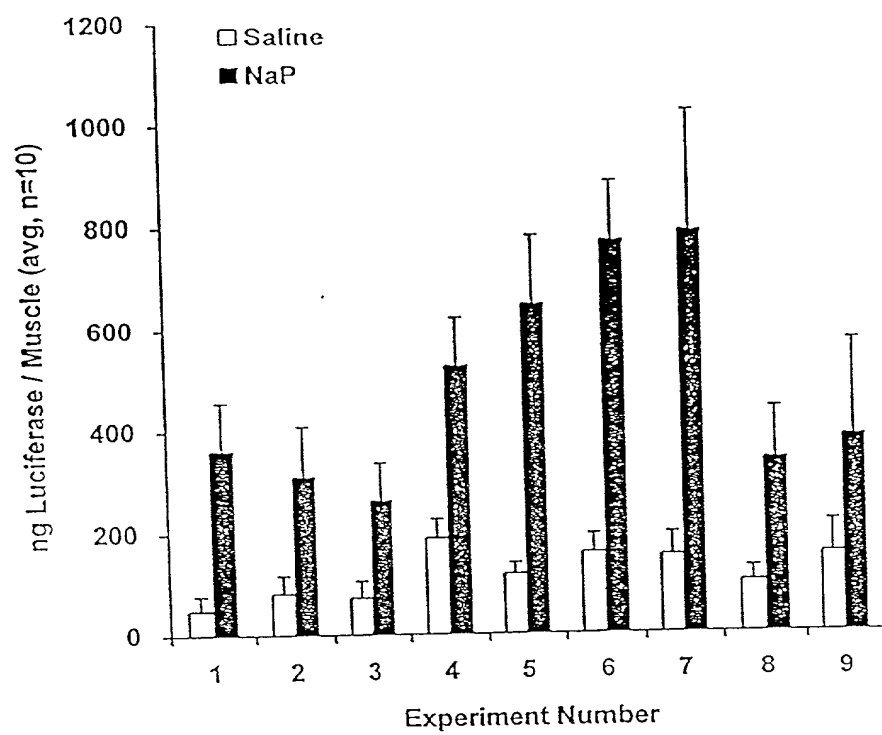


Figure 4

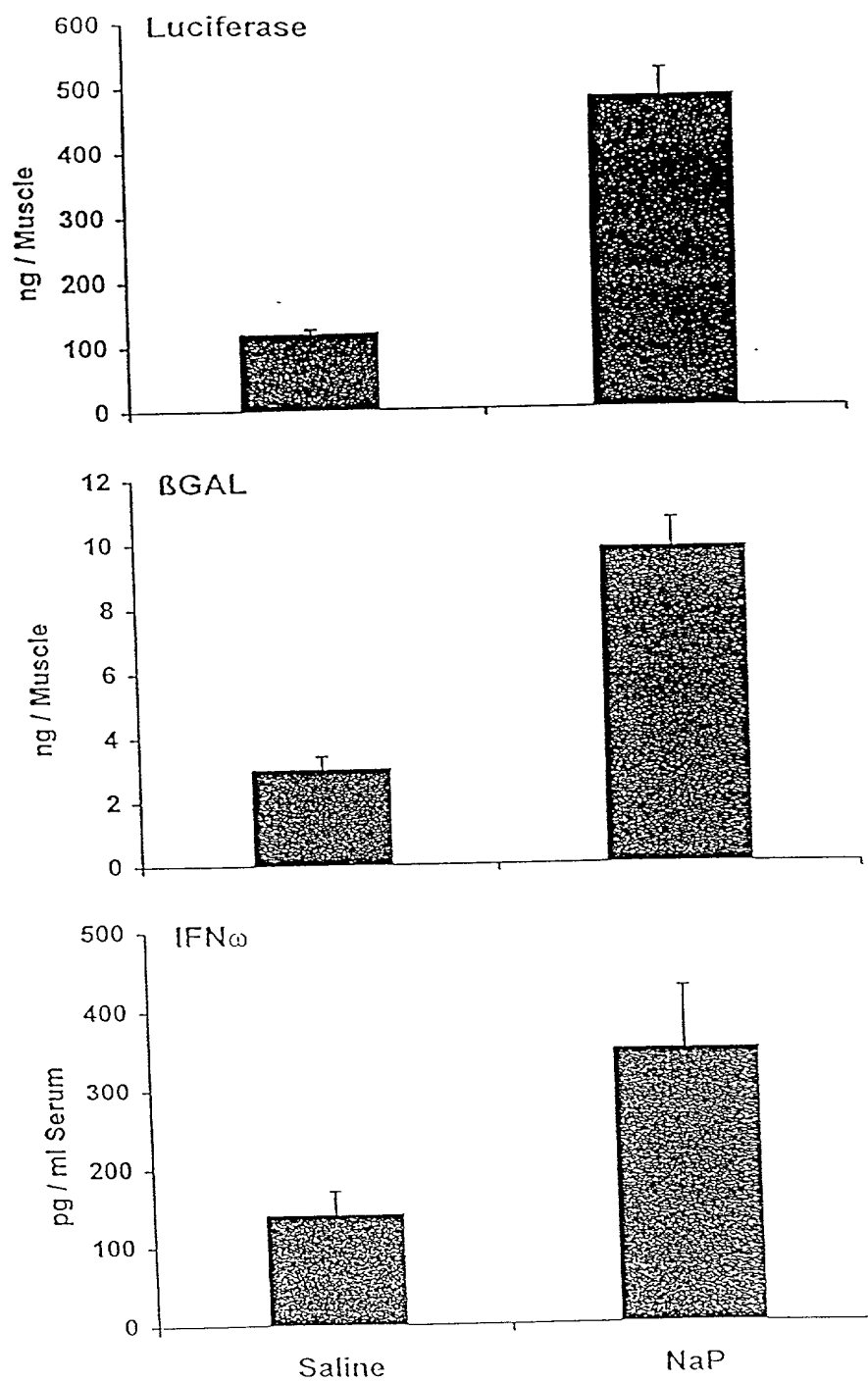
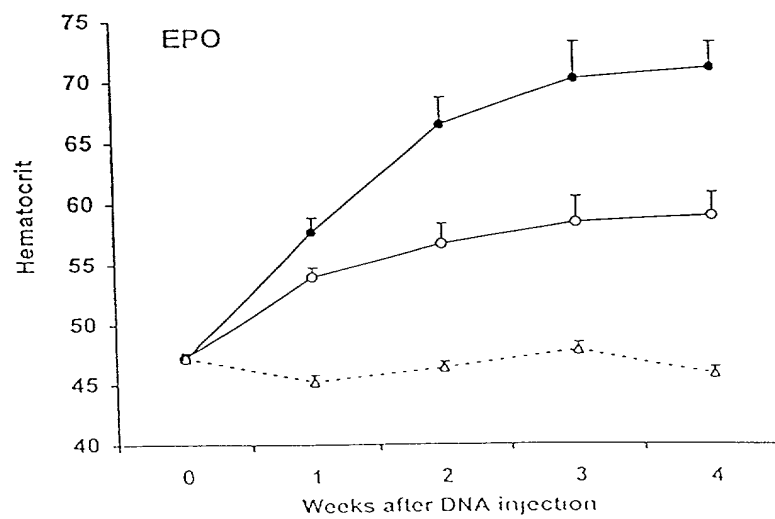
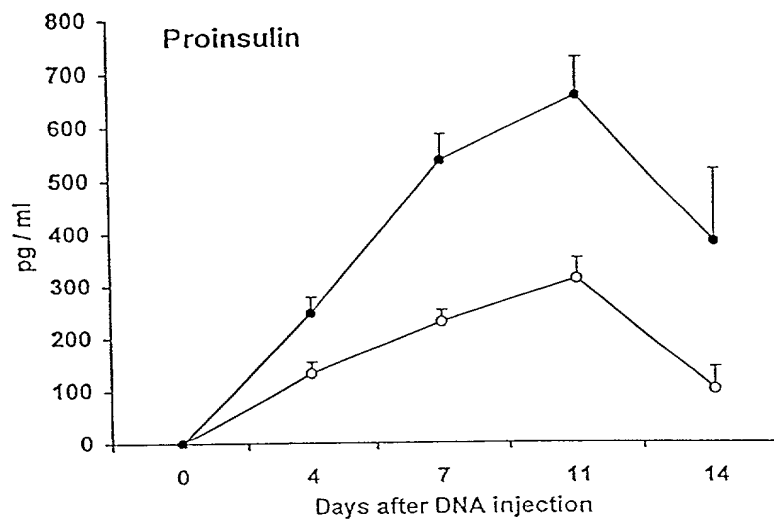
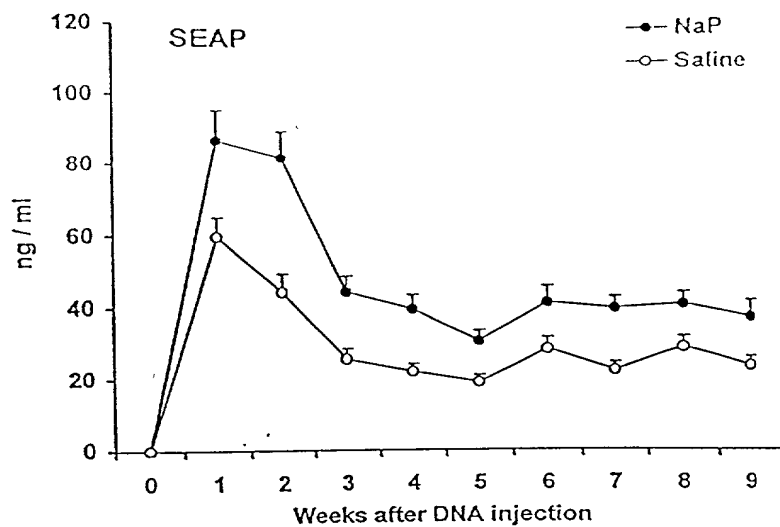


Figure 5



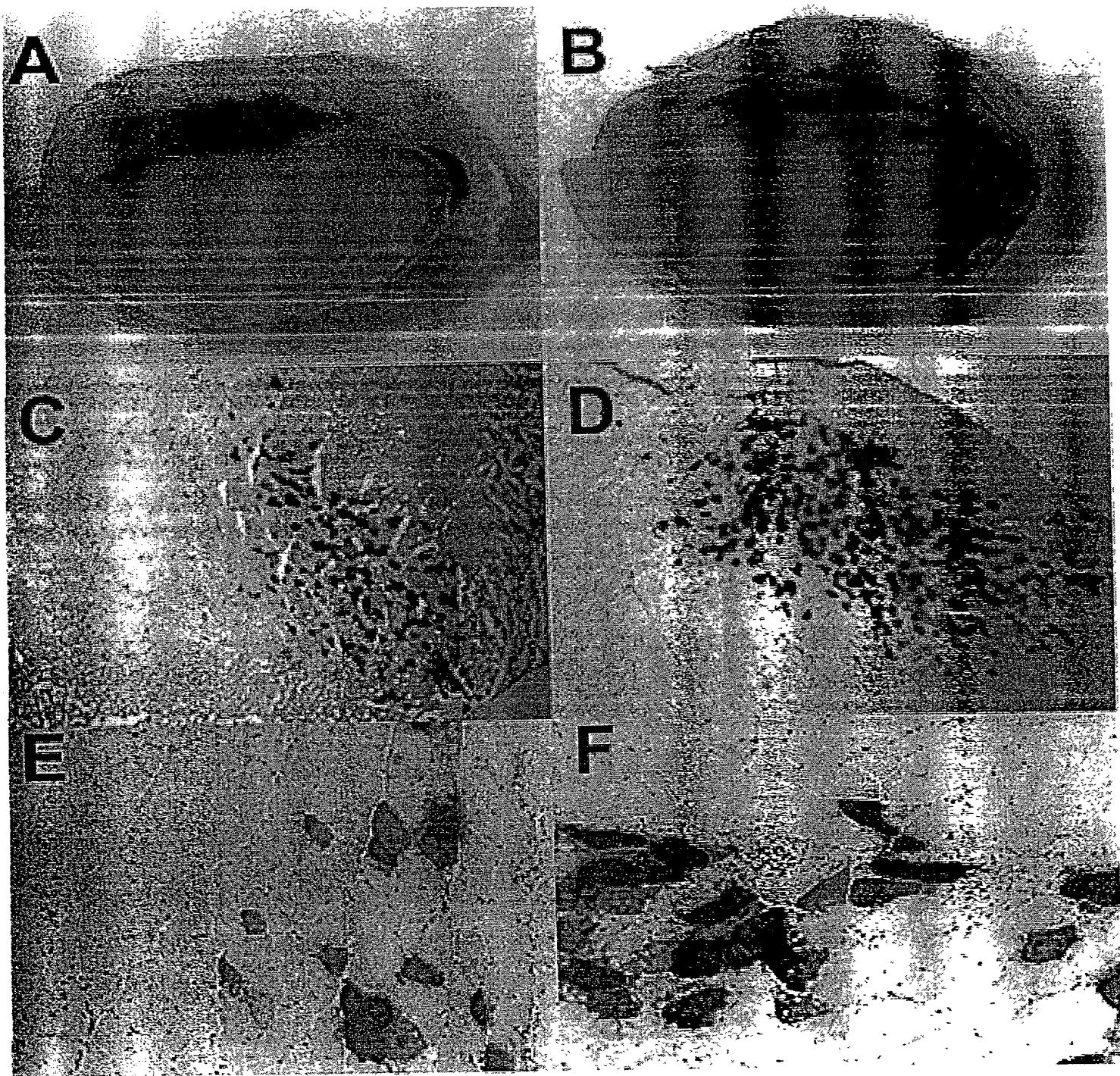


Figure 6.



Figure 7

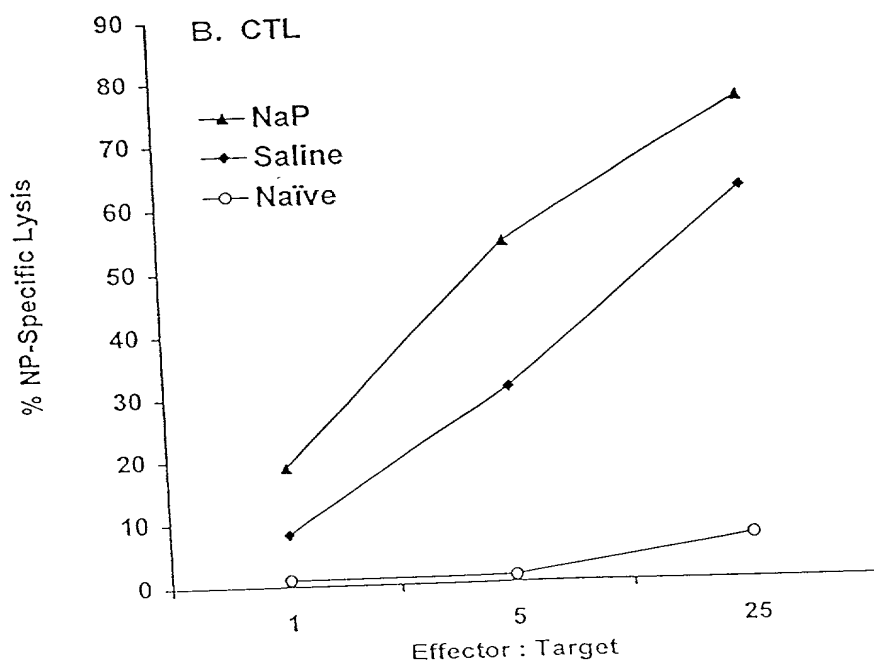
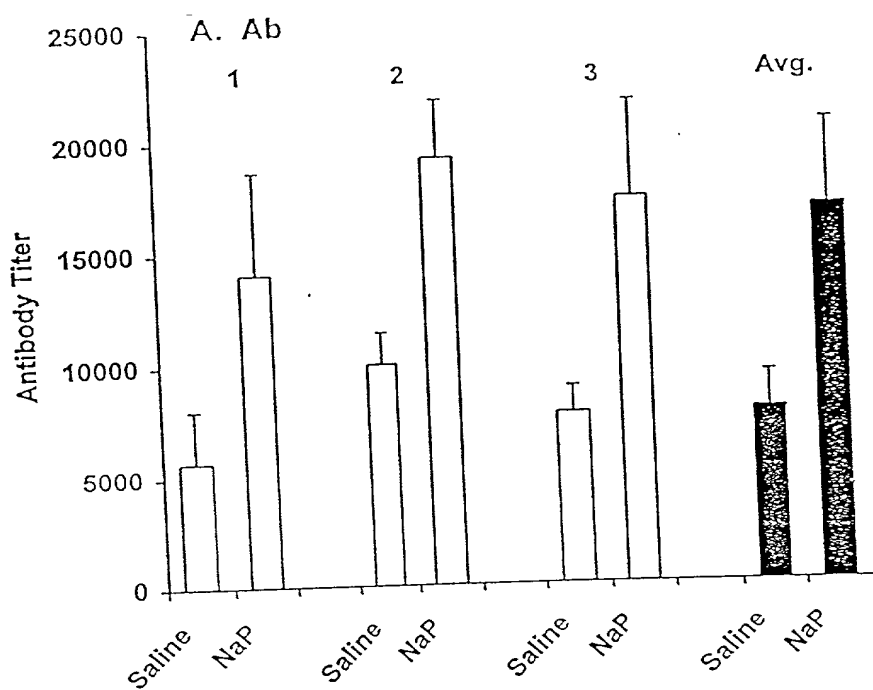


Figure 8

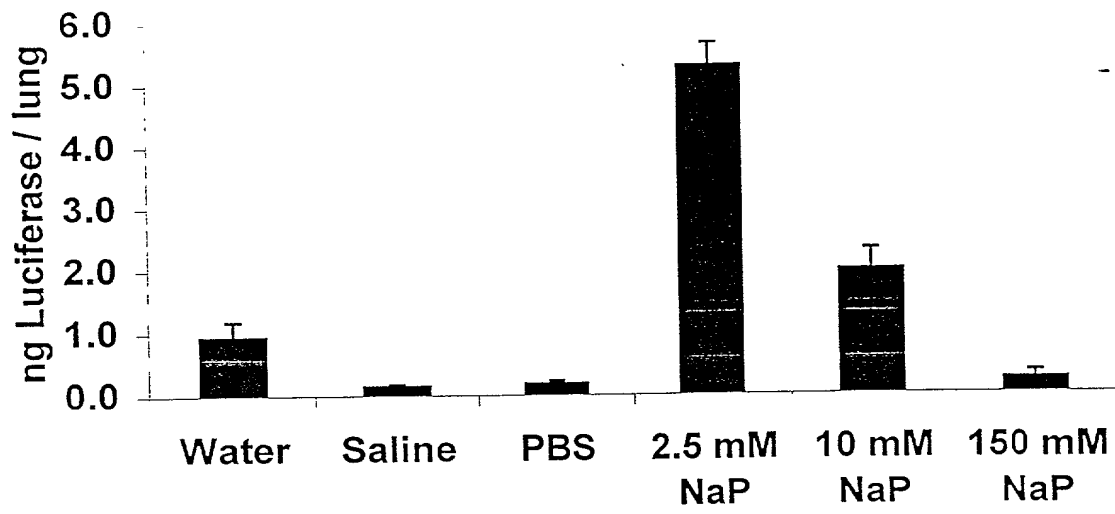


Figure 9

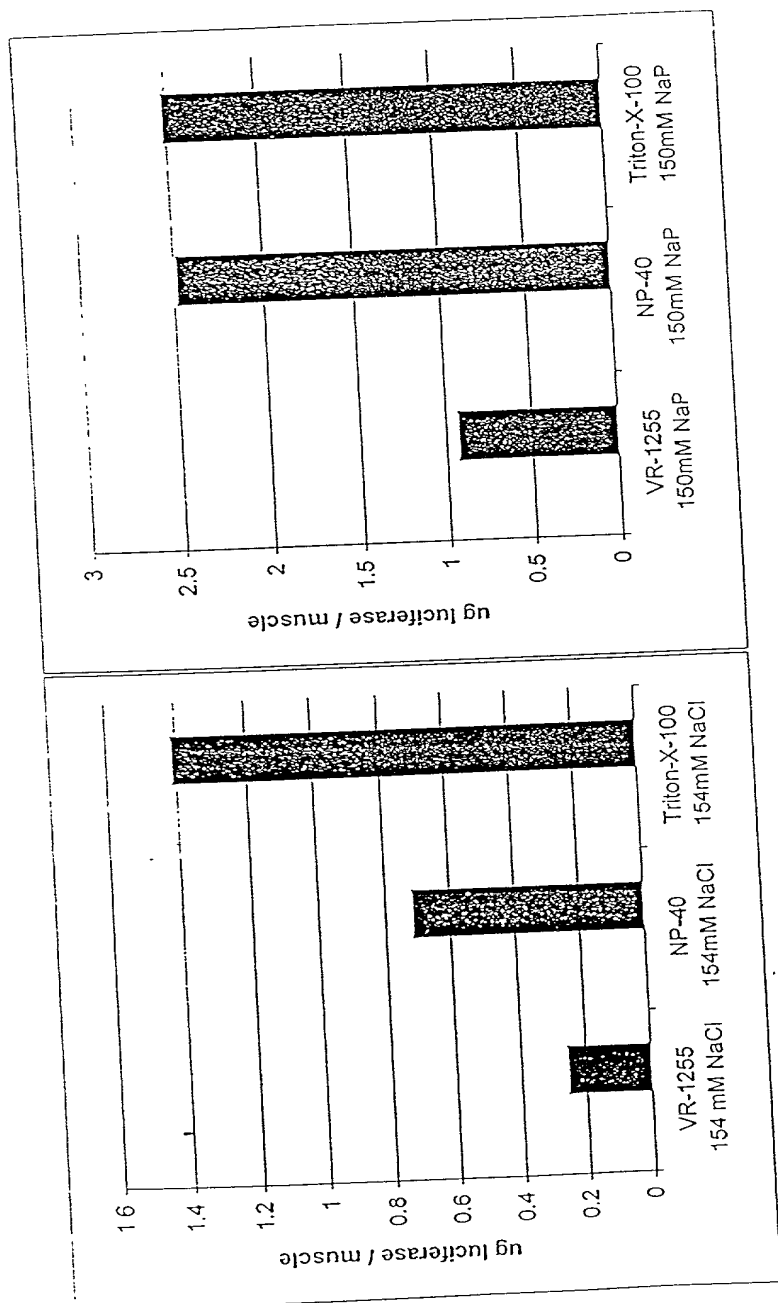
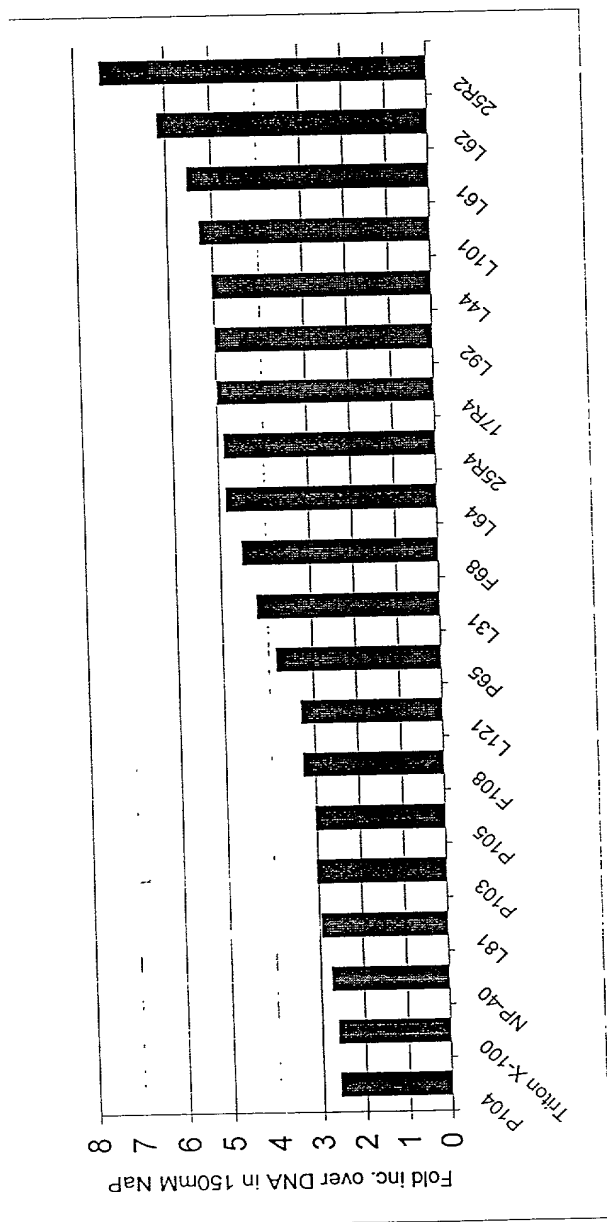


Figure 10



P104 3  
 Triton X-100 3  
 NP-40 3  
 L81 3  
 P103 3  
 P105 3  
 F108 3  
 L121 3  
 P65 4  
 L31 4  
 F68 5  
 L64 5  
 25R4 5  
 17R4 5  
 L92 5  
 L44 5  
 L101 5  
 L61 6  
 L62 6  
 25R2 7

Figure 11

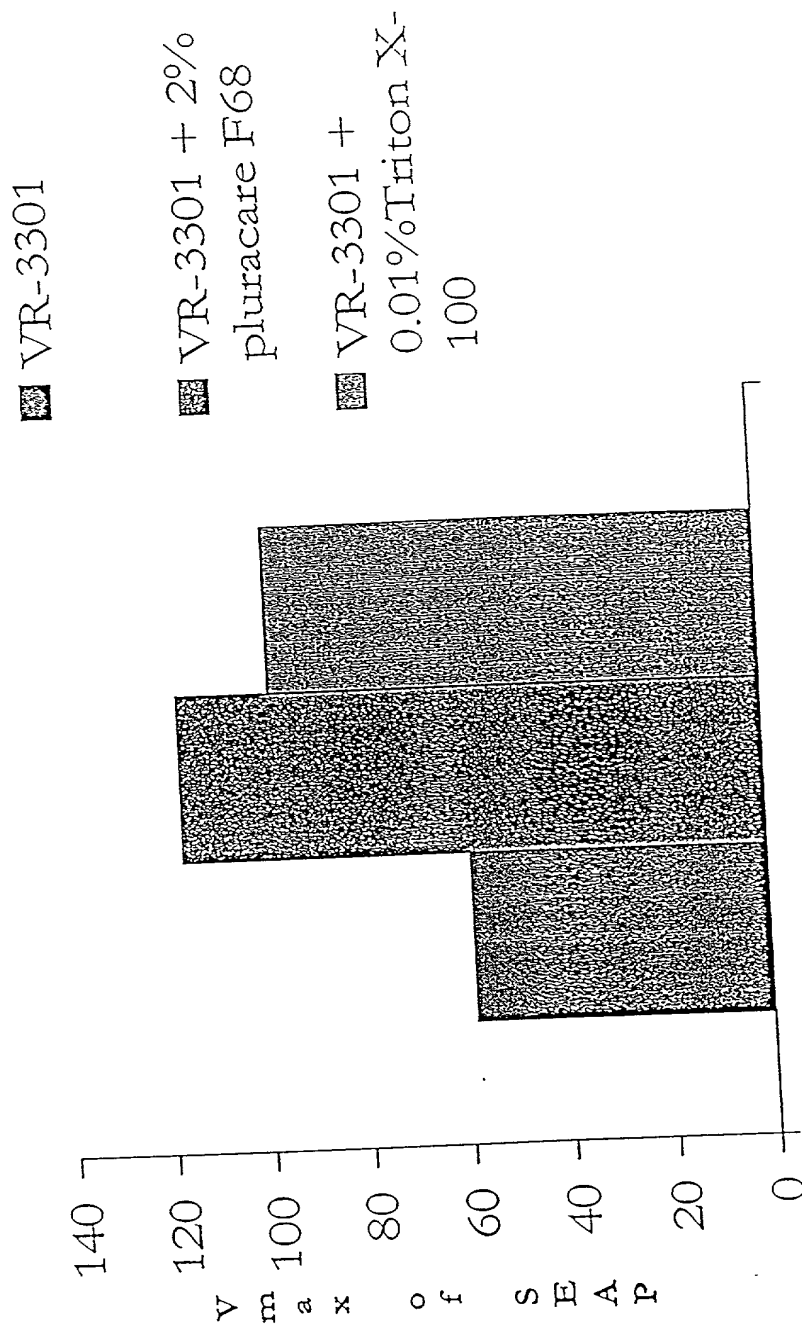


Figure 12

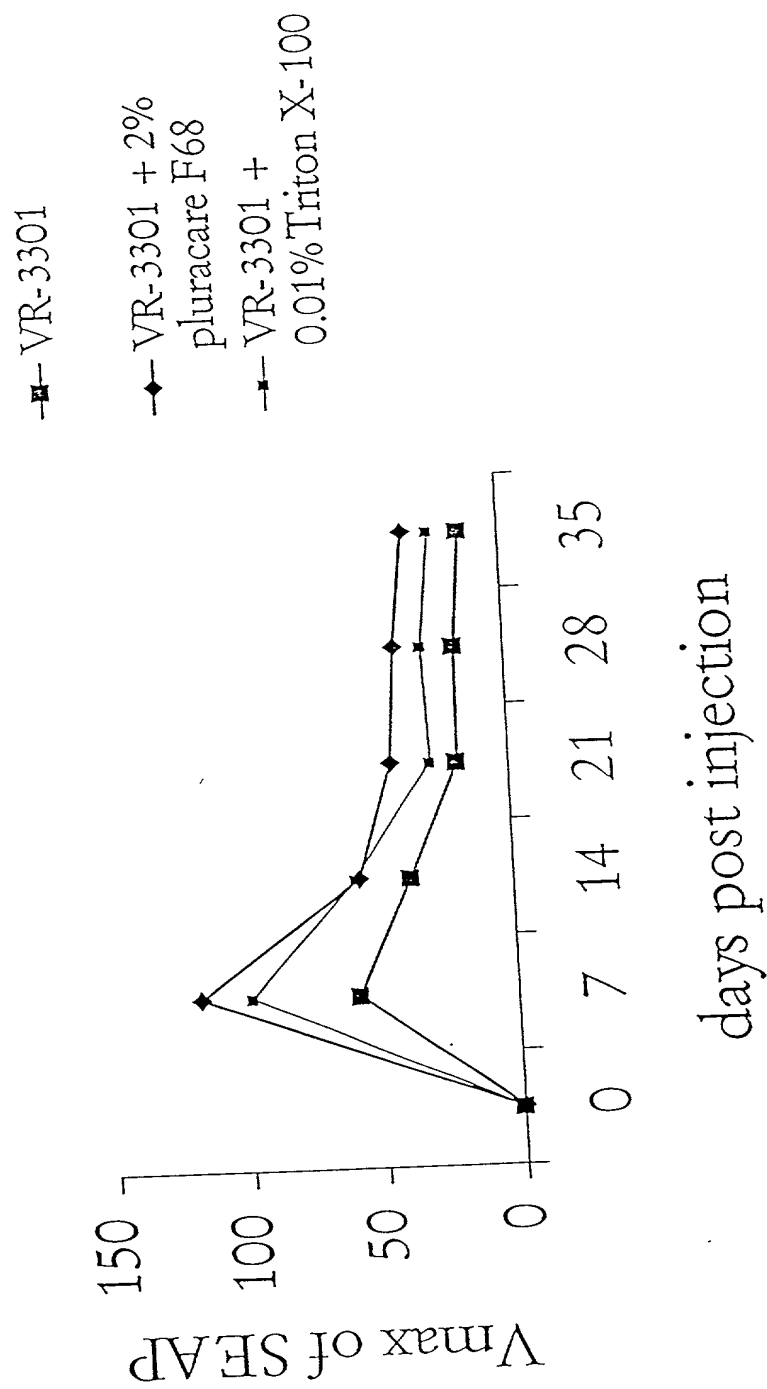


Figure 13

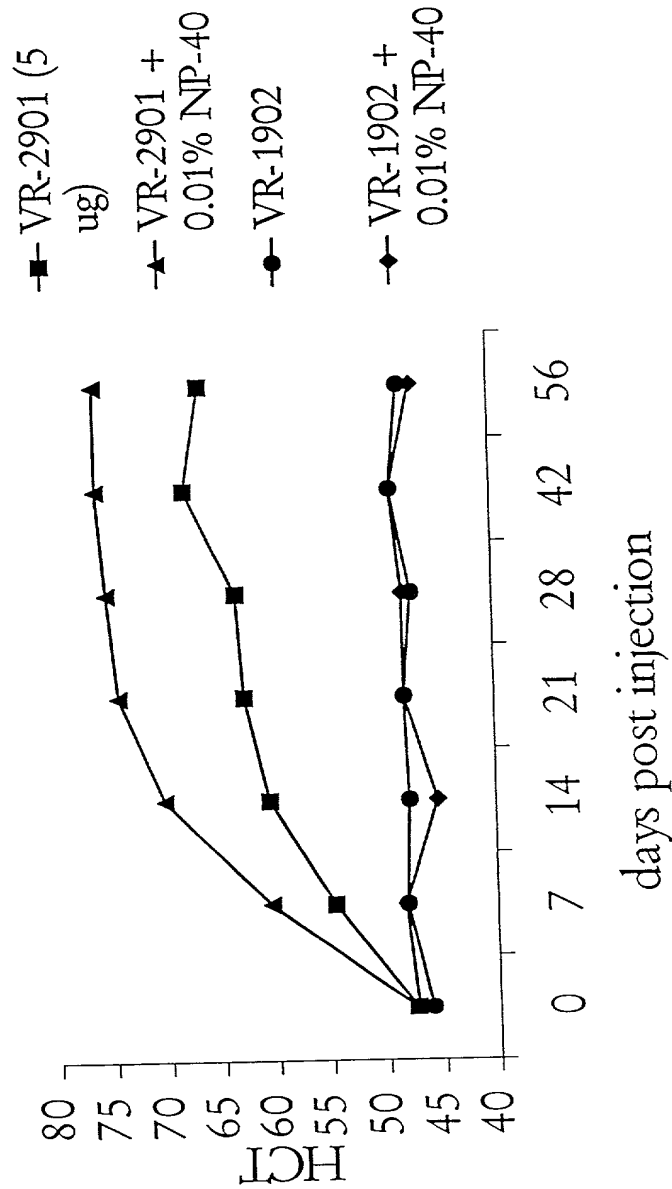


Figure 14

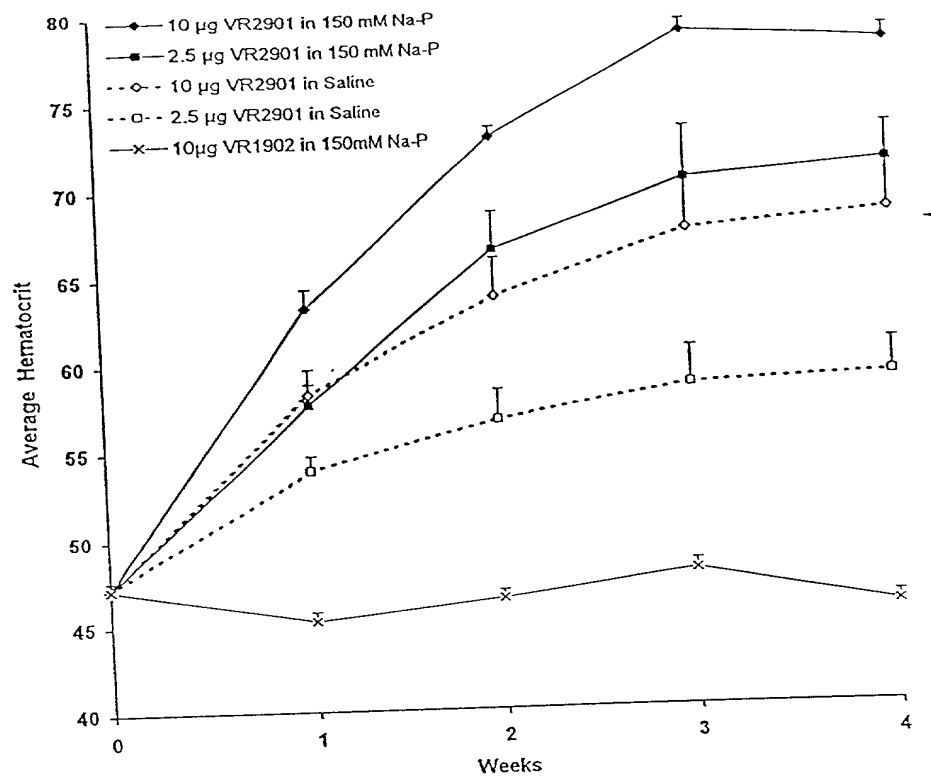
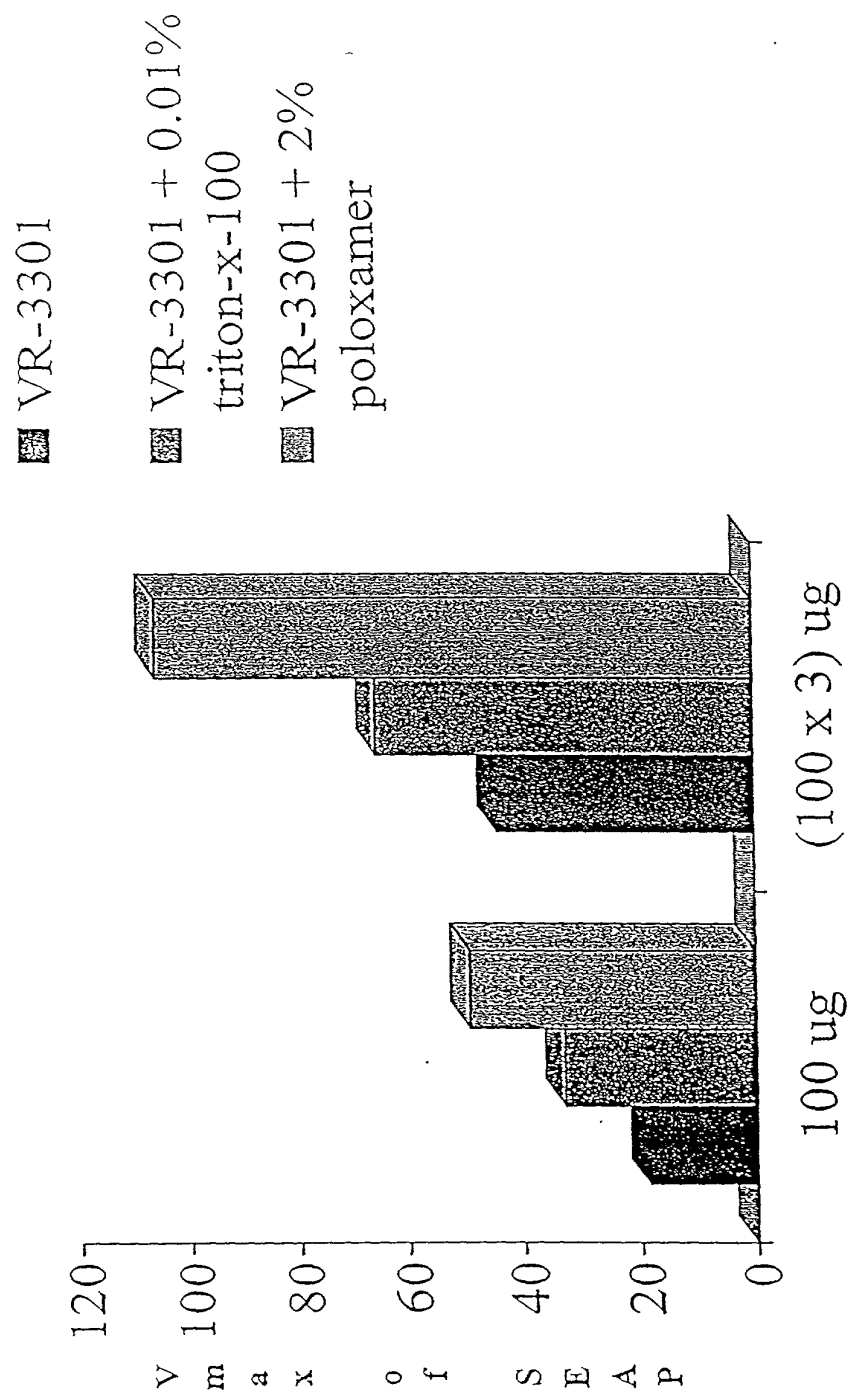




Figure 15



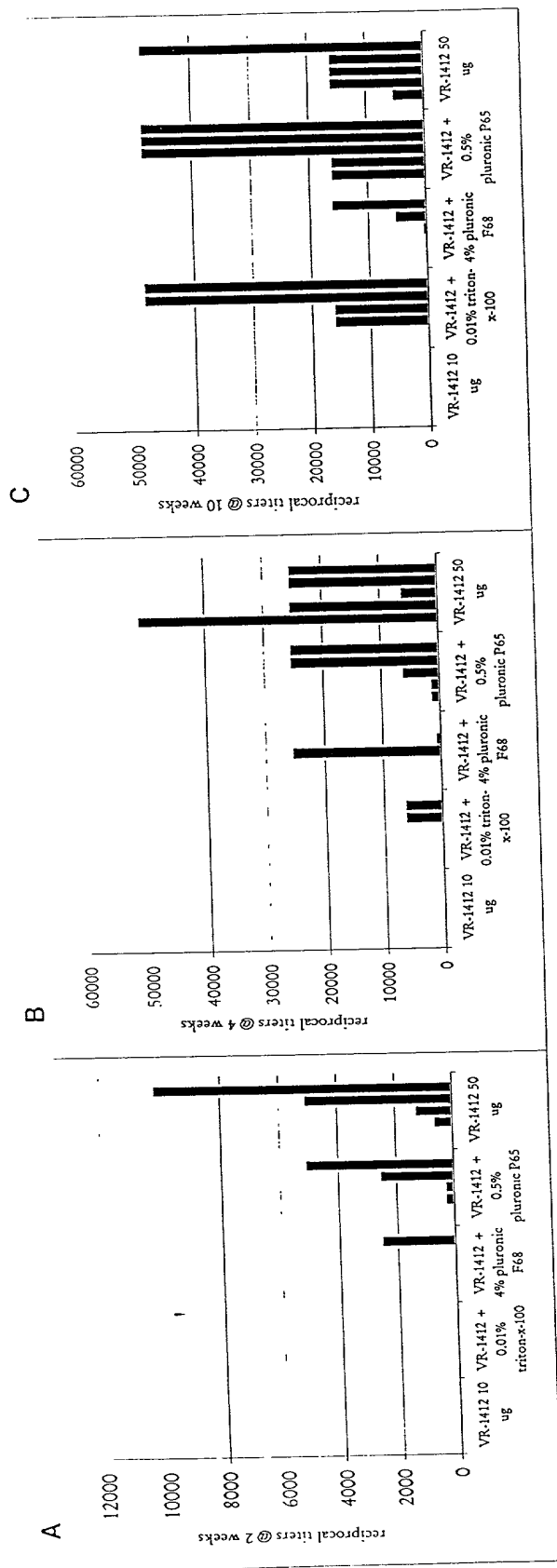


Figure 16

CTL activity is not inhibited when pDNA +  
poloxamer is administered

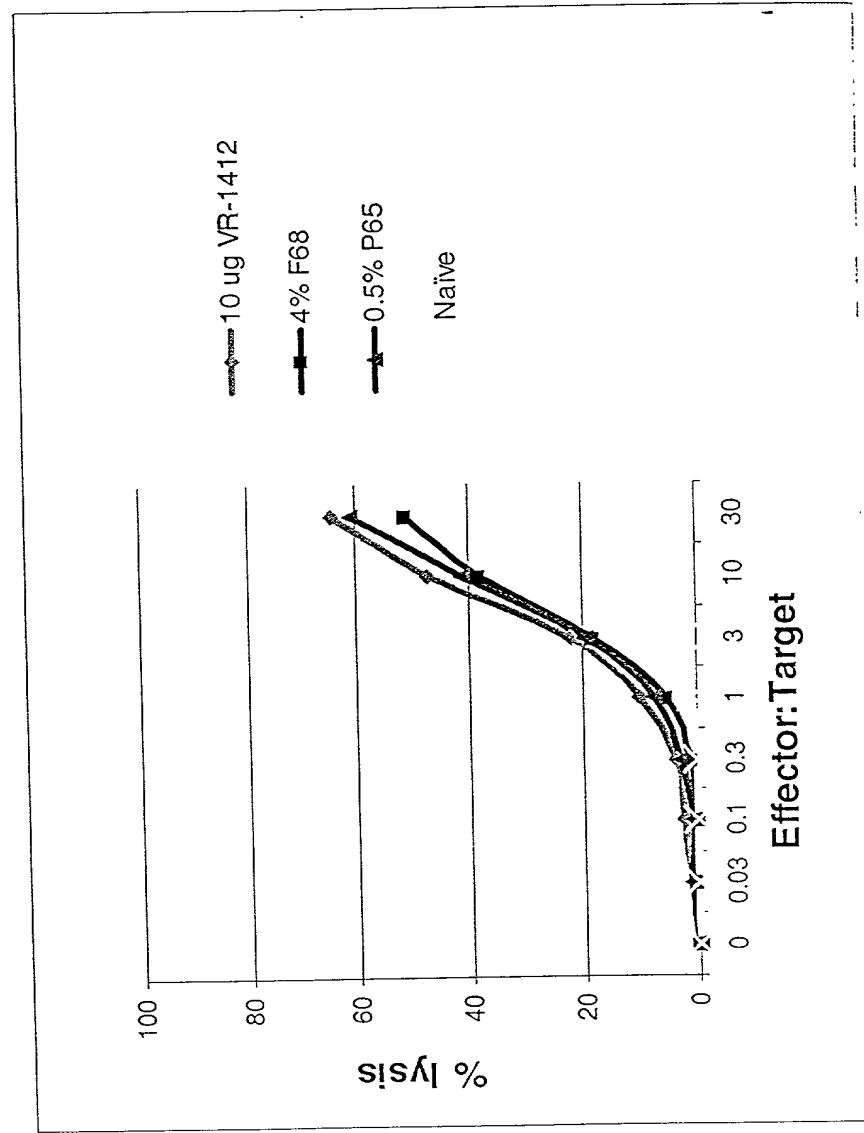


Figure. 16D

effects on IFNw pDNA mediated anti-tumor efficacy

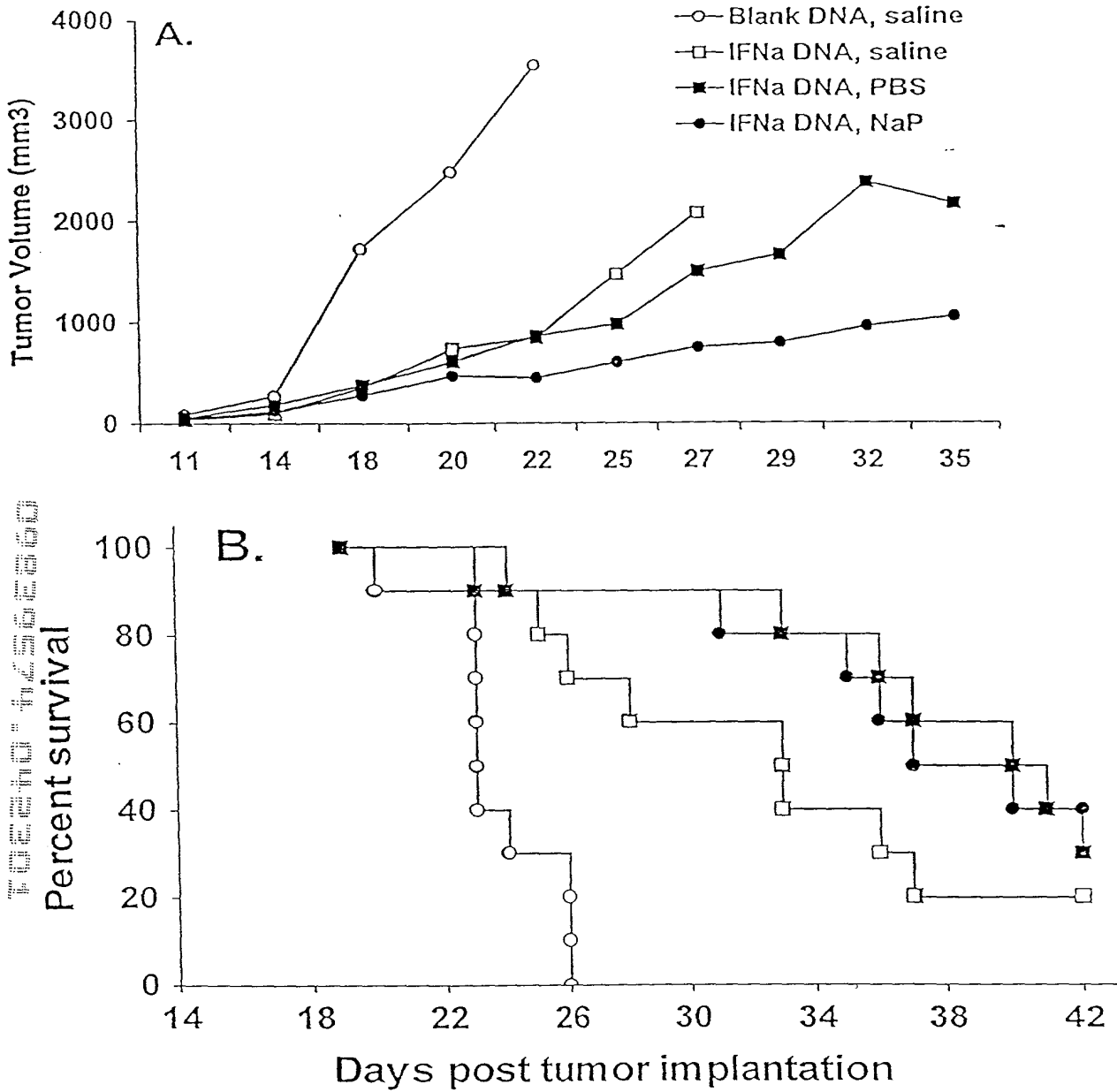


Figure 17

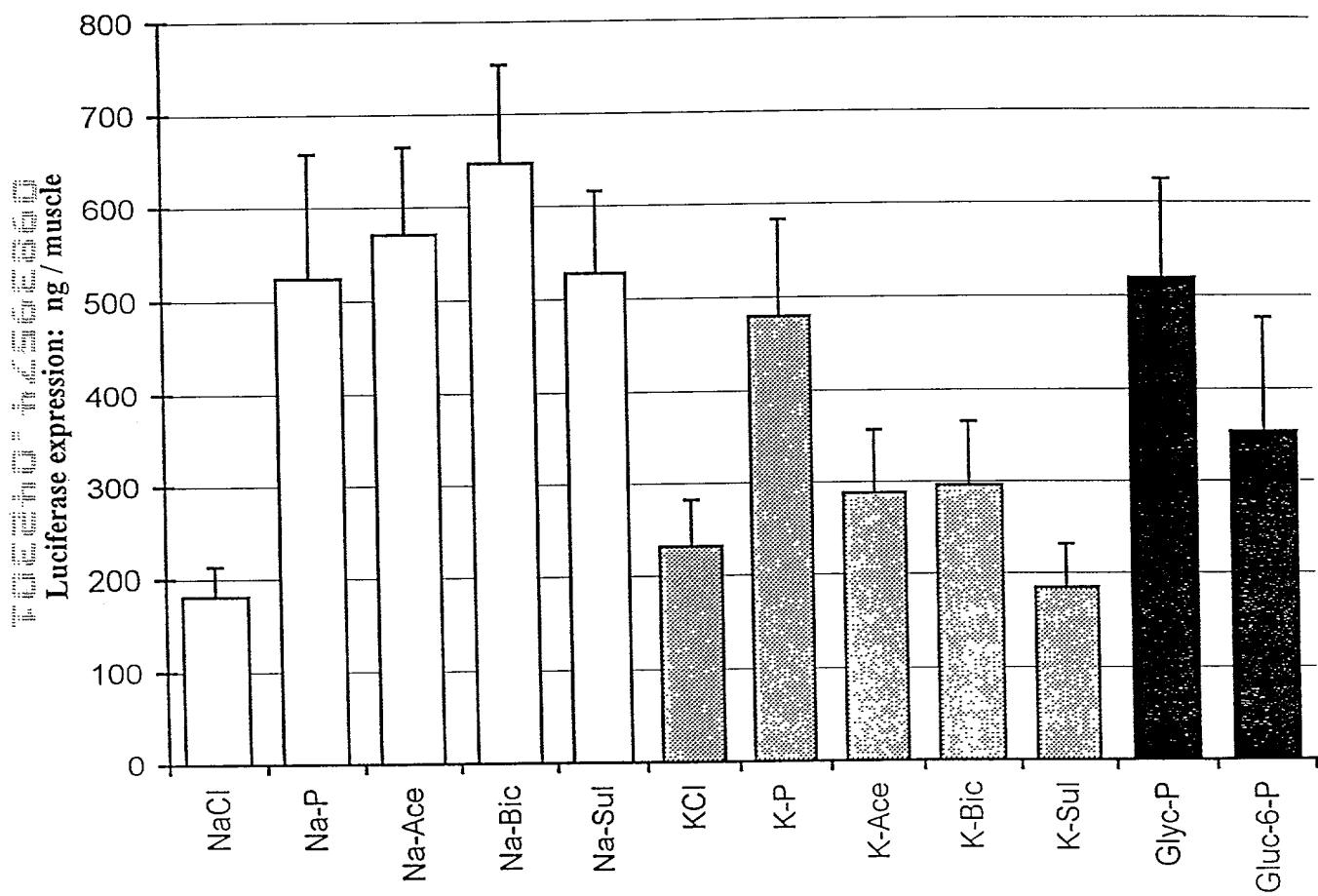
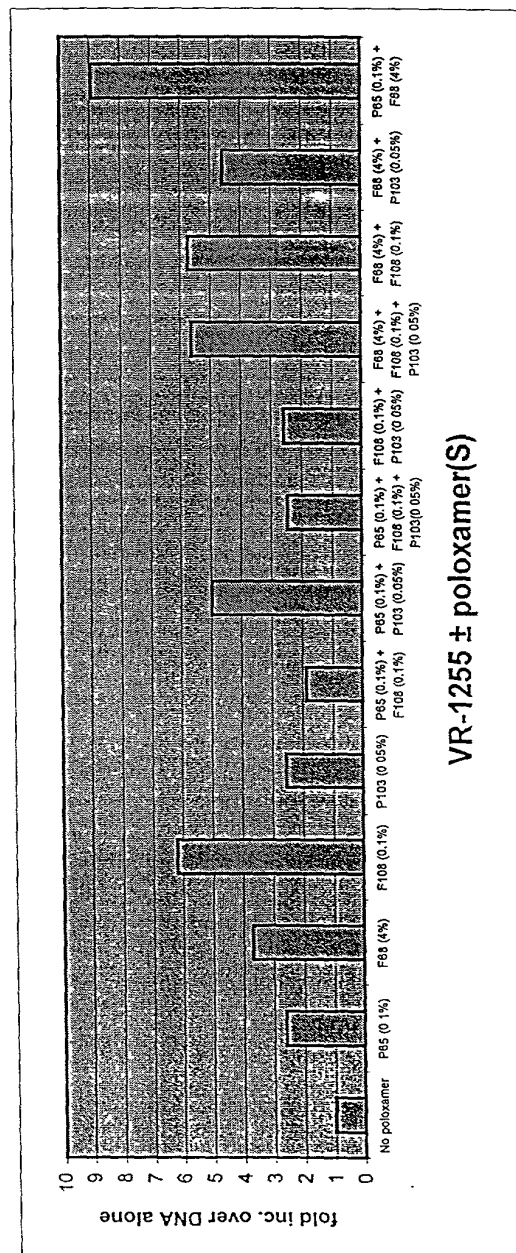
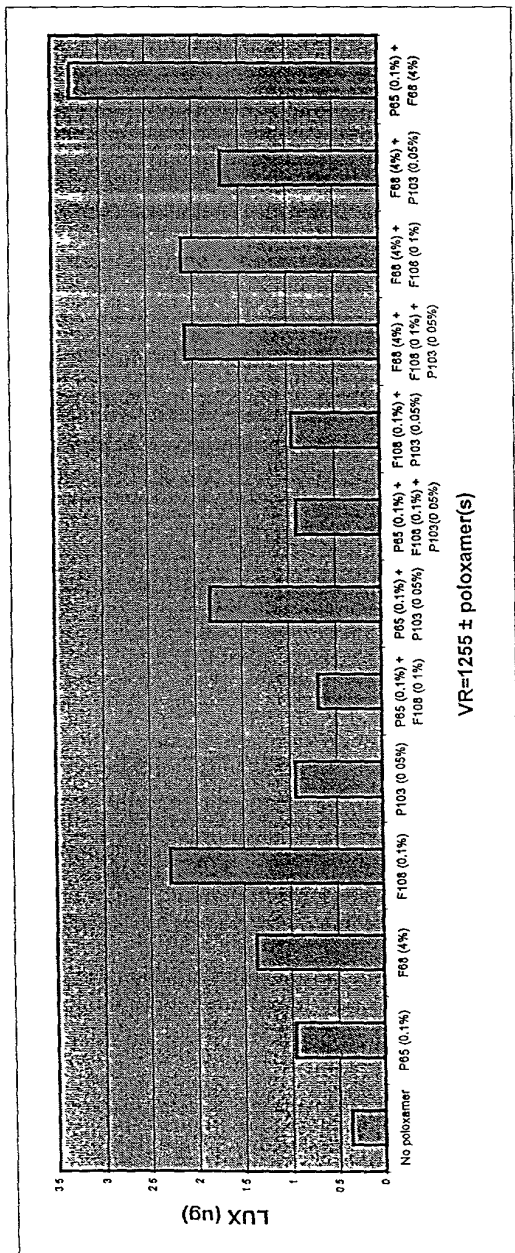


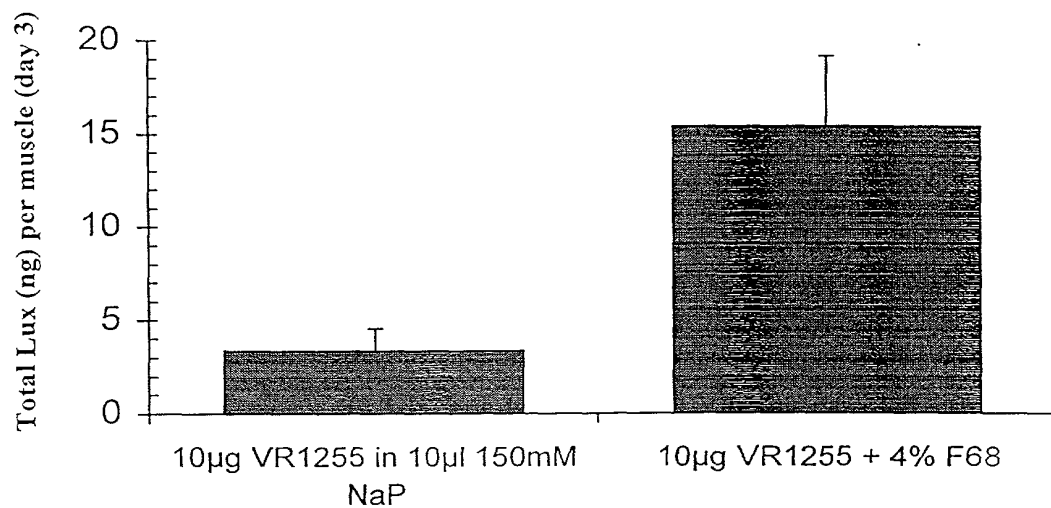
Figure 18

Figure 19



A

Day 3 luciferase expression after intramuscular  
administration of VR1255  $\pm$  poloxamer (F68)



B

Day 3 luciferase expression after intramuscular  
administration of VR1255  $\pm$  poloxamer (25R2)

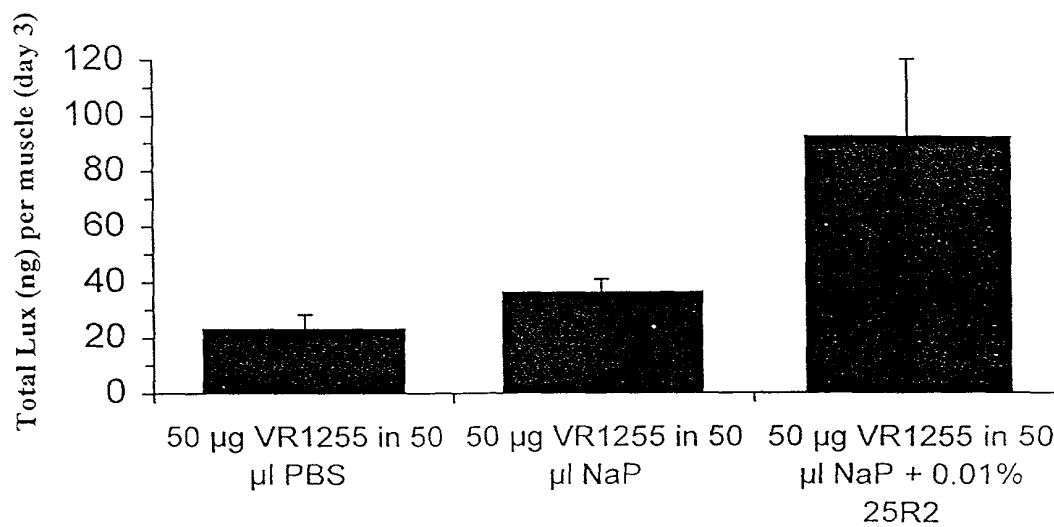


Figure 20

Fig 21

# Hematocrit levels after a single dose (1 $\mu$ g) of VR2901 $\pm$ poloxamer 25R2

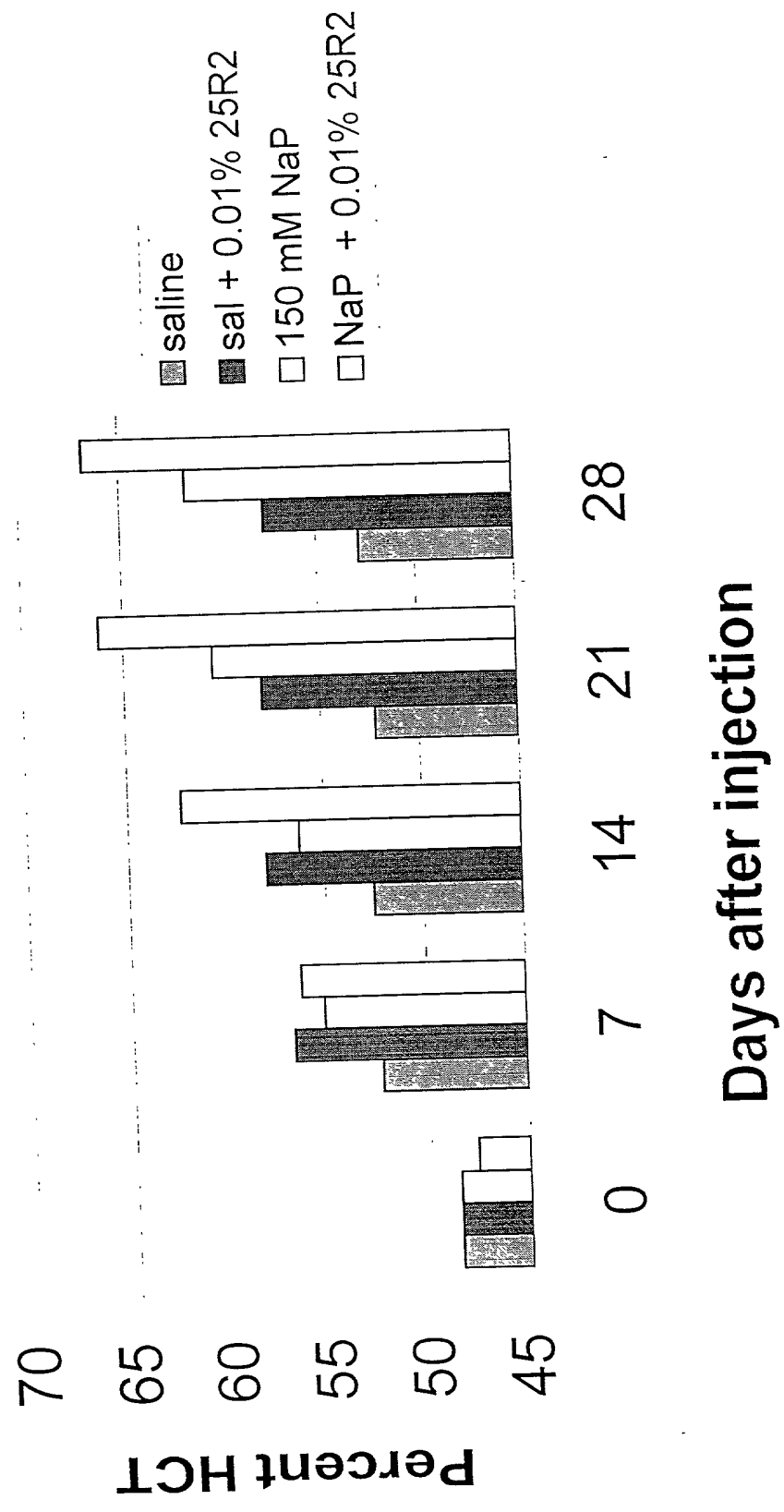




Fig 22

# HCT levels after administration of VR2996 + Poloxamer F68

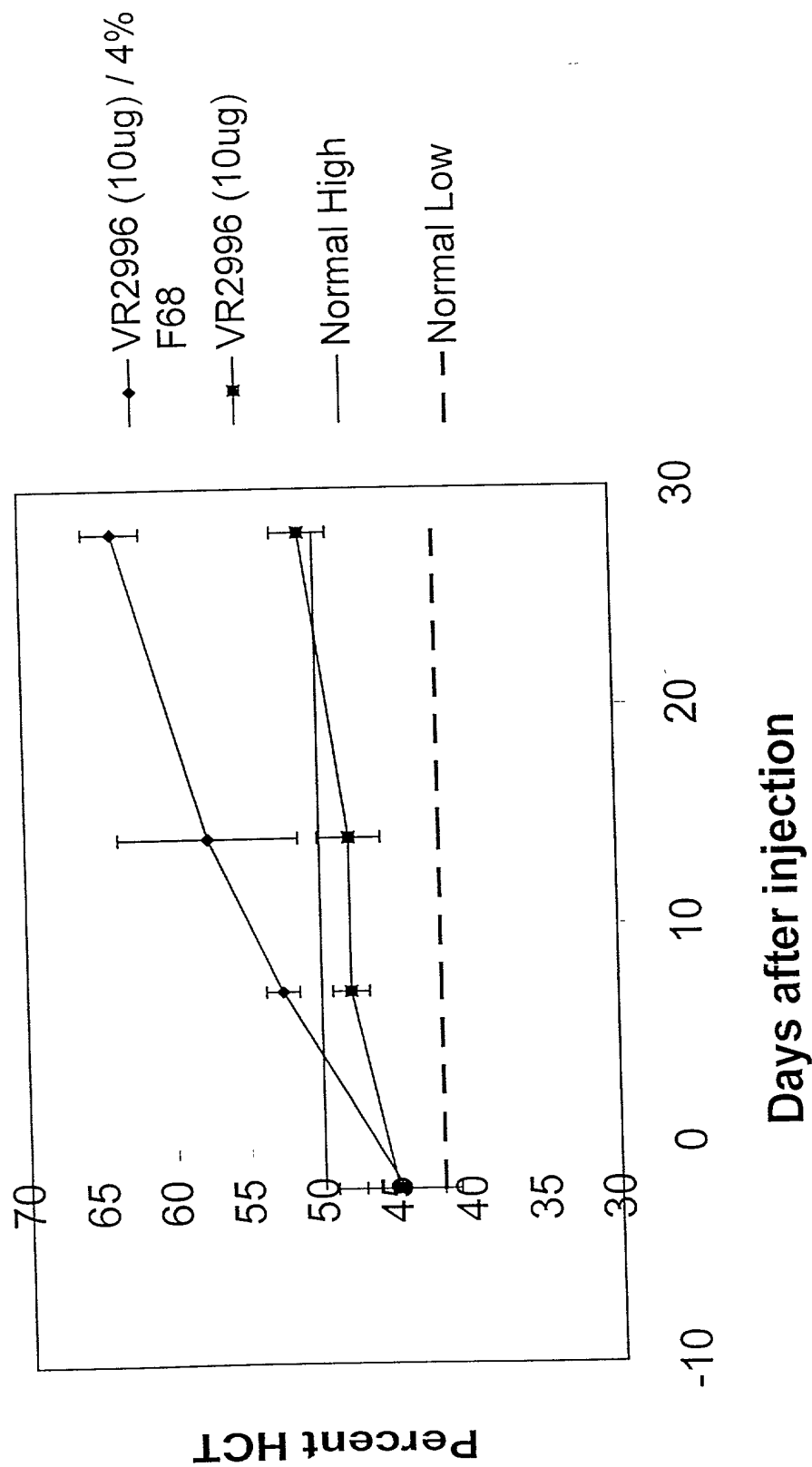


Fig 23

# DNA dose response after injection of VR1255 ± poloxamer (25R2)

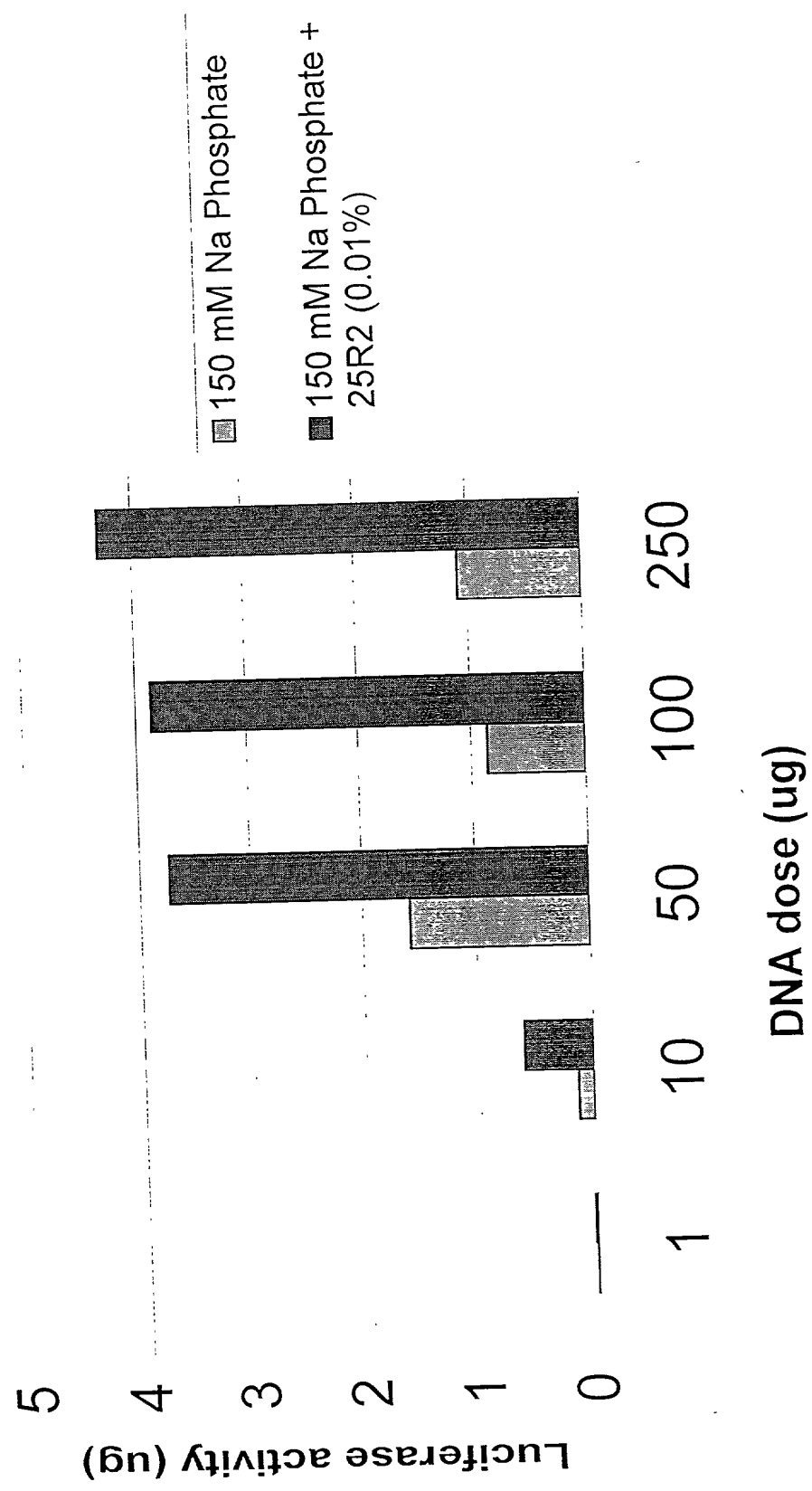


Fig. 24

# Time course of expression after delivery of VR1255 ± 25R2 (0.01%)

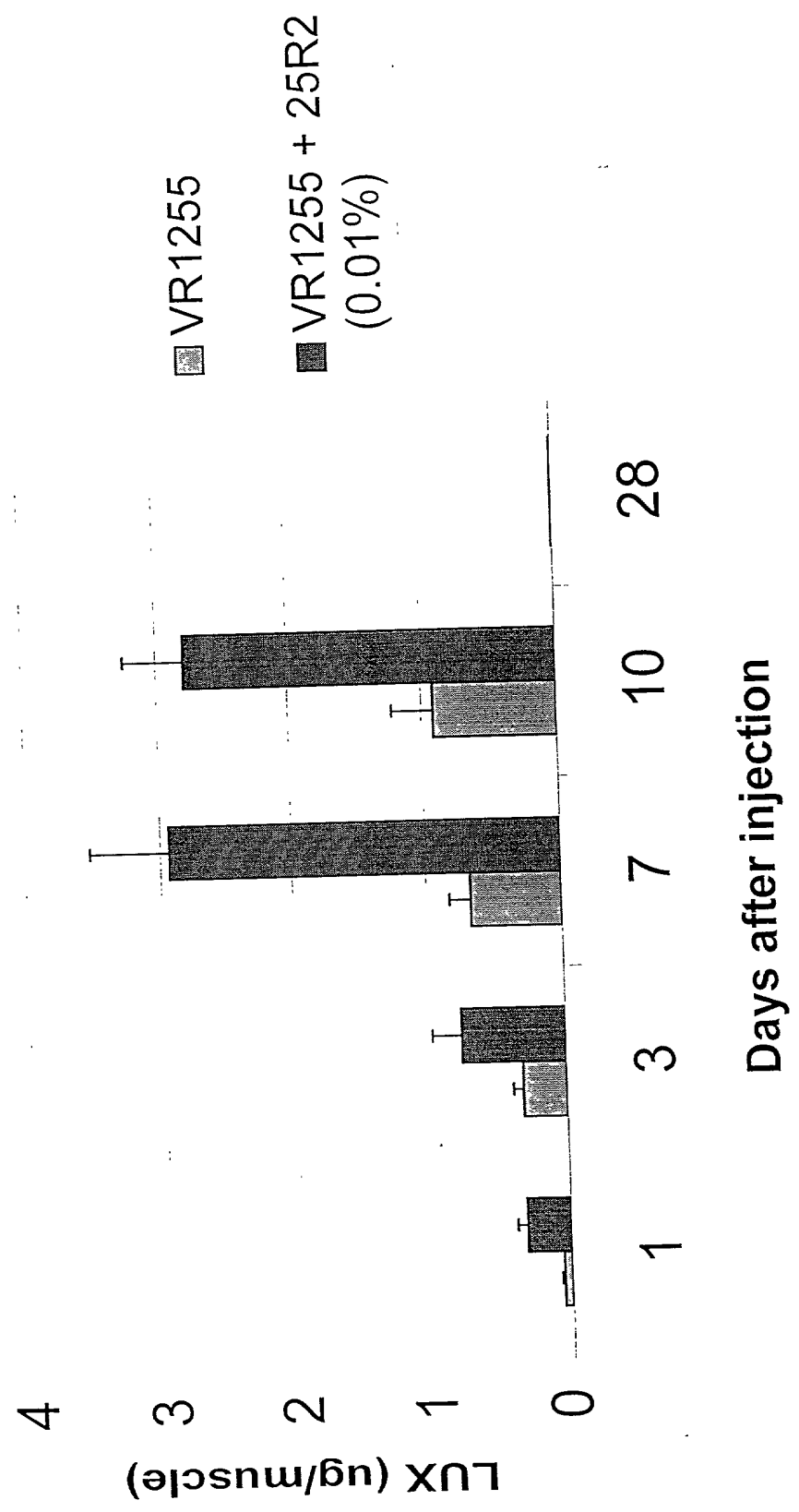
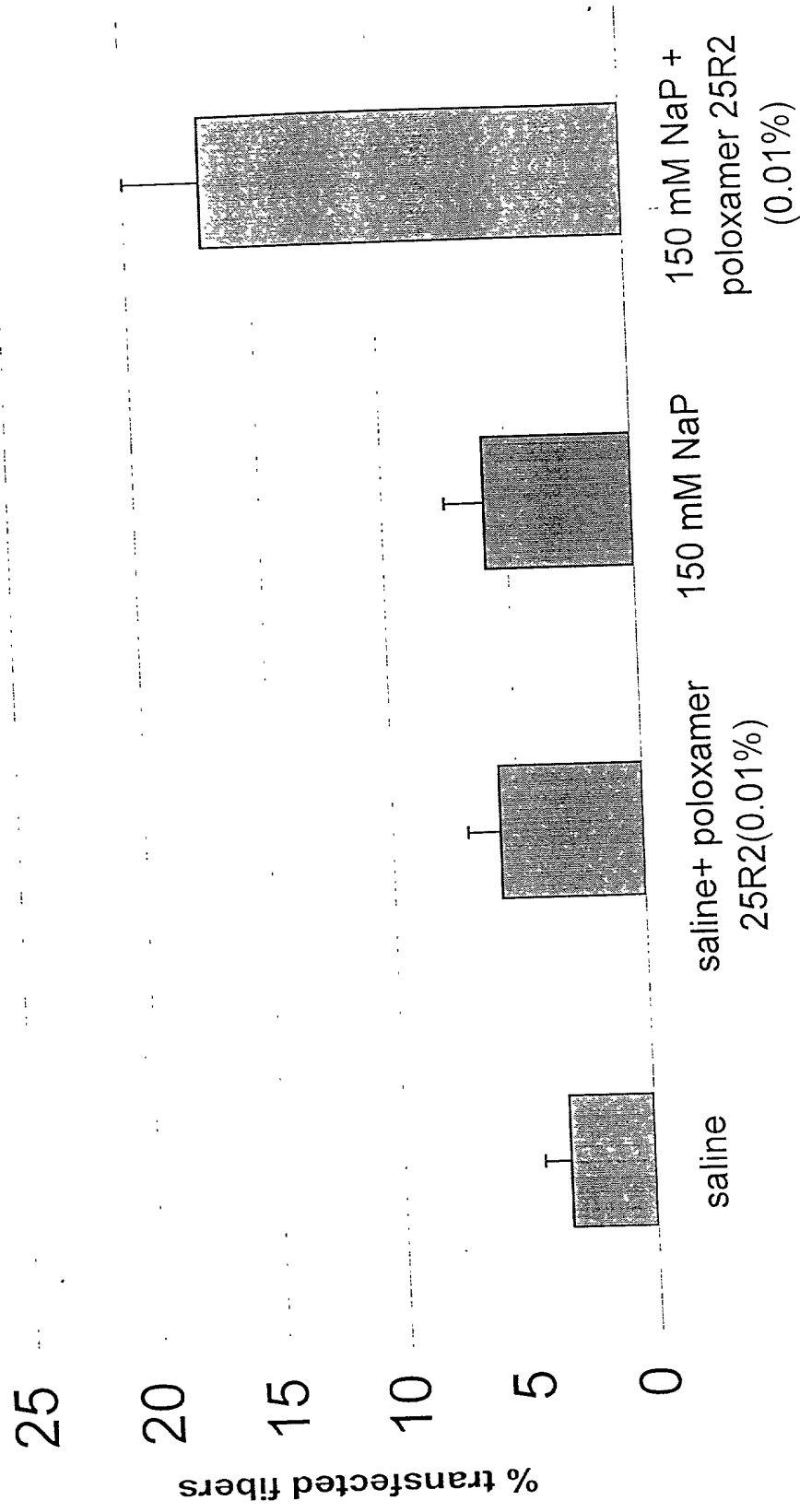


Figure 25

Transfection of mouse rectus femoris with VR1412 (pBgal)  
 $\pm$  poloxamer 25R2 (0.01%)



# Figure 26

Targeted injections of 50  $\mu$ g  $\beta$ -gal pDNA  
into murine rectus femoris  
(10  $\mu$ m section stained with x-gal)

